CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION

TECHNICAL ANALYSIS

Proposed Administrative Civil Liability Contained in Complaint No. R9-2003-0151 Standard Pacific Homes

Noncompliance with
Order No. 99-08-DWQ
National Pollutant Discharge Elimination System (NPDES)
General Permit for
Storm Water Discharges Associated With
Construction Activity (General Permit)

April 15, 2003 by Rebecca Stewart Sanitary Engineering Associate Compliance Assurance Unit

1. INTRODUCTION

This technical analysis provides a summary of factual and analytical evidence supporting administrative assessment of civil liability in the amount of \$30,000 against Standard Pacific Homes for violations of State Water Resources Control Board Order No. 99-08-DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated With Construction Activity (General Permit) as alleged in Complaint No. R9-2003-0151.

2. ALLEGATIONS

The following allegations against Standard Pacific Homes are the basis for assessing administrative civil liability and also appear in Complaint No. R9-2003-0151.

2.1. Non-Storm Water Discharge to a Municipal Separate Storm Sewer System (MS4) and Waters of the Nation

On February 14, 2003, Standard Pacific Homes discharged 388,960 gallons of potable water, sediment, and debris to the MS4 and Telegraph Canyon Creek in violation of Discharge Prohibition A.2 of Order No. 99-08-DWQ.

2.2. Storm Water Discharge to an MS4 and Waters of the Nation

On February 25, 2003, Standard Pacific Homes discharged sediment laden storm water into the MS4 and Telegraph Canyon Creek during a rain event in violation of Discharge Prohibition A.2 of Order No. 99-08-DWQ.

2.3. Failure to Implement a Storm Water Pollution Prevention Plan (SWPPP)

On February 25, 2003, Standard Pacific Homes failed to implement adequate best management practices (BMPs) required in its SWPPP which caused a discharge of sediment into the MS4 and Telegraph Canyon Creek in violation of Special Provisions for Construction Activity C.2 of Order No. 99-08-DWQ.

3. BACKGROUND

Standard Pacific Homes submitted a Notice of Intent (NOI) to comply with the terms of Order No. 99-08-DWQ on October 19, 2001 for the Sunbow Development located in the City of Chula Vista. Order No. 99-08-DWQ requires Standard Pacific Homes to develop a SWPPP to address the specific circumstances for the construction site covered by Order No. 99-08-DWQ. The SWPPP must describe how the discharger will implement BMPs to reduce pollutants in storm water and non-storm water discharges from the construction site to the BAT/BCT performance standards.

At approximately 0400 hours on February 14, 2003 a security guard observed a large quantity of water being discharged from a broken potable water line at the construction

site. The Otay Water District was subsequently notified of the discharge and was able to shut off the potable water flow by 0615 hours. The discharge was caused by the failure of a PVC water line at a 90-degree angle. It was determined that the break was caused by erosion from substantial rainfall that occurred during the previous days.

The discharge flowed downhill along Paseo Ladera Drive, entering a storm drain approximately two-thirds of the way down the hill. The discharge caused extensive erosion and damage to the sidewalk, pavement, and utilities on the west side of Paseo Ladera Drive. A large quantity of sediment and debris was discharged with 388,960 gallons of potable water to the MS4 and Telegraph Canyon Creek, located at the bottom of the hill. The City of Chula Vista conducted cleanup activities removing sediment and debris from the MS4 and Telegraph Canyon Creek. San Diego Gas & Electric was required to repair the utilities damaged by the discharge.

On February 25, 2003 City of Chula Vista inspectors observed a discharge of sediment laden storm water from the same construction site. This discharge occurred during a rain event. Inadequate BMPs at the construction site allowed sediment disturbed during the February 14, 2003 discharge to enter the MS4 and Telegraph Canyon Creek.

4. DETERMINATION OF ADMINISTRATIVE CIVIL LIABILITY

4.1. Factors to be Considered When Determining Administrative Civil Liability

California Water Code §13385(e) requires the SDRWQCB to consider several factors when determining the amount of civil liability to impose. These factors include: "...the nature, circumstance, extent and gravity of the violation, and with respect to the violator, the ability to pay, and prior history of violation, the degree of culpability, economic benefit or savings, if any, resulting from the violation, and other matters that justice may require."

4.1.1. Non-Storm Water Discharge to the MS4 and Waters of the Nation

4.1.1.1. Nature, Circumstance, Extent, and Gravity of Violation

At approximately 0400 hours on February 14, 2003 a security guard discovered a substantial discharge coming from a broken water main at the Standard Pacific Homes Sunbow Development. The local police department notified the Otay Water District and the discharge was terminated at approximately 0615 hours. Standard Pacific Homes reports that the discharge occurred due to the failure of a concrete thrust block used to support a 90-degree angle in a 4-inch PVC pipe. The damage occurred from erosion caused by rain events occurring the previous four days. A subcontractor, Prime Time Construction installed the water main.

By letter dated April 7, 2003, Standard Pacific Homes estimates the discharge to be 92,560 gallons. However, the Regional Board has determined that the calculation used by Standard Pacific Homes to convert the number of units of water into gallons was incorrect and a more accurate estimate of the potable water discharged is 388,960 gallons.

Water from the break flowed downhill along the west side of Paseo Ladera Drive. The discharge caused extensive erosion. Approximately two-thirds of the way down the hill, the water entered the MS4 on Paseo Ladera Drive. An unquantified amount of sediment and debris was carried by the discharge into the MS4 and entered Telegraph Canyon Creek located at the bottom of the hill. The discharge also cause extensive damage to the sidewalk, pavement, and utilities on the west side of Paseo Ladera Drive creating nuisance conditions on the street as well as in the receiving water

The City of Chula Vista's Storm Water Management Section responded to the discharge on February 14, 2003 and reported the incident to the Regional Board pursuant to requirements of their municipal storm water NPDES permit. Standard Pacific Homes also reported the discharge to the Regional Board on February 14, 2003.

Suspended sediment in surface waters can cause harm to aquatic organisms by abrasion of surface membranes, interference with respiration, and sensory perception in aquatic fauna. Suspended sediment can reduce photosynthesis in and survival of aquatic flora by limiting the transmittance of light. The Water Quality Control Plan for the San Diego Basin (9) (Basin Plan), contains a water quality objective for sediment which concludes that the suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

The beneficial uses for Telegraph Canyon Creek are as follows:

- a. Municipal Supply (potential)
- b. Industrial Supply
- c. Water Contact Recreation

- d. Non-Contact Water Recreation
- e. Warm Freshwater Habitat
- f. Wildlife Habitat

4.1.1.2. Degree of Culpability

Standard Pacific Homes bears the full responsibility of implementing the proper construction standards, as well as protection standards for constructed structures such as water mains. Standard Pacific Homes is a large developer that has numerous developments within this region and staff identified as being in charge of compliance with the requirements of Order No. 99-08-DWQ. In addition, it was predicted and well advertised that the existence of El Nino related atmospheric conditions could bring heavier than normal rainfall to the region during the 2002/2003 rain season. It is Standard Pacific Homes' responsibilities as the NPDES permittee to be aware of and implement the necessary BMPs at the construction site to protect against both storm water and non-storm water discharges at the site.

4.1.1.3. Prior History of Violation

Standard Pacific Homes has several sites under development in the region. It has been documented by several SDRWQCB field inspectors that Standard Pacific Homes has been responsive to SDRWQCB concerns regarding inadequate BMPs identified at other construction sites in the region, but that in all instances the discharger has not initially implemented adequate BMPs in most areas.

As a result of the discharge violations addressed in this enforcement action, Standard Pacific Homes was issued a California Water Code §13267 request for information regarding both incidents. The information was due on April 7, 2003 and received on the same date. However, the response was incomplete by omitting all requested information about the February 25, 2003 discharge other than stating that the discharge occurred.

4.1.1.4. Economic Savings

Pursuant to California Water Code §13385(e), assessments should, at a minimum, take away whatever economic

savings gained by a discharger a result of the violations being addressed. The water main break was caused by lack of BMP protection. It is estimated that the BMPs needed to protect the water main would be a minimal expense compared to the proposed assessment for this violation.

4.1.1.5. Ability to Pay and Ability to Continue in Business

At this time, the SDRWQCB has no information that Standard Pacific Homes is unable to pay the proposed administrative civil liability (ACL) or how payment of the proposed ACL would affect the ability of Standard Pacific Homes to remain in business.

4.1.1.6. Other Matters as Justice May Require

Over the course of dealing with Standard Pacific Homes regarding this matter, the SDRWQCB has invested an estimated 40 hours to investigate and consider action regarding this matter. At an average rate of \$80 per hour, the total investment by the SDRWQCB is \$3,200.

4.1.2. Storm Water Discharge into MS4 and Waters of the Nation

4.1.2.1. Nature, Circumstance, Extent and Gravity of the Violation

The City of Chula Vista's Storm Water Compliance Division notified the SDRWQCB that they had observed another sediment discharge to Telegraph Canyon Creek from the Standard Pacific Homes construction site on February 25, 2003. The City reported that the discharge was caused by and due to the previous water main break on February 14, 2003. The City of Chula Vista issued Standard Pacific Homes and its subcontractor PrimeTime Construction, a Notice of Code Violation and Order to Clean and Abate for causing pollution of the MS4.

The SDRWQCB issued Standard Pacific Homes a California Water Code §13267 request for information on March 5, 2003 asking for information regarding the February 25, 2003 discharge. Standard Pacific Homes submitted an incomplete response on April 7, 2003. The only information supplied regarding the February 25, 2003 discharge was a copy of a letter sent by Standard Pacific Homes to the City of Chula Vista stating that rain water

picked up soil that may have entered the MS4 and receiving water even though BMPs were in place prior to the rain event.

4.1.2.2. Degree of Culpability

Documentation submitted by the City of Chula Vista indicates that inadequate cleanup of the sediment discharged from the February 14, 2003 water main break contributed to the sediment discharge on February 25, 2003. The reason for the inadequate cleanup is not known due to the incomplete response to the California Water Code §13267 violation. However, if site conditions made complete cleanup impossible at the time, additional BMPs should have been implement to ensure that additional rain events would not have caused a discharge.

4.1.2.3. Prior History of Violation

See Section 4.1.1.3.

4.1.2.4. Economic Savings

The SDRWQCB does not have information available to determine what economic savings was enjoyed by Standard Pacific Homes from the failure to cleanup the sediment discharged to the site during the previous discharge. It is anticipated that the proposed liability contained in the Complaint will adequately recover any economic savings associated with this violation.

4.1.2.5. Ability to Pay and Ability to Continue in Business

See Section 4.1.1.5.

4.1.2.6. Other Matters as Justice May Require

See Section 4.1.1.6.

4.1.3. Failure to Implement a Storm Water Pollution Prevention Plan

4.1.3.1. Nature, Circumstance, Extent and Gravity of the Violation

On February 27, 2003 the City of Chula Vista issued a Notice of Code Violation and Order to Clean and Abate to Standard Pacific Homes in response to both the February 14, 2003 non-storm water discharge and the February 25, 2003 storm water discharge. By letter dated March 13, 2003 to the City of Chula Vista, Standard Pacific Homes reported that the February 25, 2003 discharge observed by City staff occurred even though BMPs were in place before the rain event.

Since BMPs were in place on February 25, 2003 and a discharge resulted, it is safe to say that the BMPs that were in place were inadequate. The City has indicated that the February 25, 2003 discharge occurred as a result of the non-storm water discharge on February 14, 2003. As the photographic evidence of the February 14, 2003 discharge indicates, extensive erosion occurred at the construction site that, unless thoroughly cleaned up would require significantly more BMPs that were in place to contain any additional discharges due to rain events.

4.1.3.2. Degree of Culpability

Standard Pacific Homes holds full responsibility for either providing adequate cleanup of the discharged sediment and effects of the February 14, 2003 non-storm water discharge and/or the installation of additional BMPs to ensure that all future rain events would not cause sediment discharges from the site. In this instance, Standard Pacific Homes failed to use the proper judgement by not installing the BMPs necessary to prohibit a second discharge.

4.1.3.3. Prior History of Violation

See Section 4.1.1.3.

4.1.3.4. Economic Savings

Standard Pacific Homes did realize some economic benefit by not installing BMPs that were adequate for the site after 8

the damage caused by the February 14, 2003 discharge. However, it is believed that the economic benefit is less than the proposed liability for this violation.

4.1.3.5. Ability to Pay and Ability to Continue in Business

See Section 4.1.1.5.

4.2. Maximum Civil Liability Amount

Pursuant to California Water Code §13385 the maximum civil liability that the Regional Board may assess is (a) ten thousand dollars (\$10,000) per day of violation (per violation); and (b) ten dollars (\$10) for every gallon discharged, over one thousand gallons discharged, that was not cleaned up. California Water Code § 13385(e) requires that, when pursuing civil liability under California Water Code §13385, "At a minimum, liability shall be assessed at a level that recovers the economic benefit, if any, derived from the acts that constitute the violation."

4.2.1. Non-Storm Water Discharge to an MS4 and Waters of the Nation

The discharge occurred over a period of one day on February 14, 2003. Therefore, the maximum civil liability which could be imposed by the SDRWQCB for this measure of liability is ten thousand dollars (\$10,000).

Based on using the information submitted by Standard Pacific Homes regarding the number of units of water discharge and using the correct conversion factor of 1 unit equals 748 gallons, the non-storm water discharge was 388,960 gallons. Therefore the maximum civil liability which could be imposed by the SDRWQCB for this measure of liability, based on a per gallon assessment of ten dollars per gallon, is three million eight hundred seventy nine thousand six hundred dollars (\$3,876,600).

The total maximum civil liability that could be imposed by the SDRWQCB for this violation is three million, eight hundred eighty six thousand six hundred dollars (\$3,886,000).

4.2.2. Storm Water Discharge to an MS4 and Waters of the Nation

The discharge of sediment laden storm water to the MS4 and Waters of the Nation occurred over a period of one day on February 25, 2003. Therefore, the maximum civil liability which could be imposed by the SDRWQCB for this measure of liability

is ten thousand dollars (\$10,000).

Adequate information is not available to determine the volume discharged for this event, therefore this calculation will not be applied to this violation.

The total maximum civil liability that could be imposed by the SDRWQCB for this violation is ten thousand dollars (\$10,000).

4.2.3. Failure to Implement a Storm Water Pollution Prevention Plan

Standard Pacific Homes failed to either cleanup the discharge that occurred on February 14, 2003, or failed to implement adequate BMPs to compensate for the damage caused to the construction site as a resulted discharge. Failure to cleanup or implement BMPs occurred on February 25, 2003 for one day of violation. Therefore, the maximum civil liability which could be imposed by the SDRWQCB for this violation is ten thousand dollars (\$10,000).

(\$3,886,000 + \$10,000 + \$10,000)

4.2.4. Total Maximum Civil Liability

The total maximum liability that could be imposed by the SDRWQCB for these violations is three million nine hundred six thousand dollars (\$3,906,000).

4.3. Proposed Civil Liability Per Violation

The proposed amount of civil liability attributed to each violation was determined by taking into consideration the factors discussed in section 4.1, as well as the maximum civil liability that the SDRWQCB may assess as discussed in section 4.2.

The total proposed civil liability shall be \$30,000 as discussed in sections 4.3.1., 4.3.2., and 4.3.3.

4.3.1. Non-Storm Water Discharge to an MS4 and Waters of the Nation

The discharge of 388,960 gallons of potable water along with the large quantity of sediment and debris suspended in the discharge created nuisance conditions by damaging the roadway, sidewalk, and underground utilities in addition to the MS4 and Telegraph Canyon Creek. Because the broken water main was caused by not installing the proper storm water protection to the structure without

having adequate BMPs in place to contain the discharge or minimize the damage caused by the discharge, the liability for this measure of liability for days of violation, will be ten thousand dollars (\$10,000).

The SDRWQCB has determined that a per gallon assessment for this discharge is not warranted due to the fact that the there is no information available to determine the volume of sediment laden storm water that was discharged to the MS4 and Telegraph Canyon Creek. Estimates by the City of Chula Vista indicate that a minimal amount of sediment entered the receiving water.

4.3.2. Storm Water Discharge to the MS4 and Waters of the Nation

The February 25, 2003 discharge of sediment laden storm water to the MS4 and Telegraph Canyon Creek was caused by latent effects of the previous February 14, 2003 discharge. As a result, the liability for this measure of liability shall be ten thousand dollars (\$10,000).

4.3.3. Failure to Implement a SWPPP

Standard Pacific Homes' failed to either adequately address the erosion and sedimentation caused by the February 14, 2003 discharge or failed to implement adequate BMPs to control the discharge of sediment from the construction site on February 25, 2003. Because it is likely that there were inadequate BMPs between February 14, 2003 and February 25, 2003, the liability proposed for this one day of violation is ten thousand dollars (\$10,000).

4.4. Total Proposed Administrative Civil Liability

The total proposed civil liability in this matter is \$30,000 based on an assessment of \$10,000 for the non-storm water discharge on February 14, 2003, \$10,000 for the storm water discharge on February 25, 2003, and \$10,000 for failure to implement a SWPPP on February 25, 2003.